

PCT

NOTIFICATION OF ELECTION
(PCT Rule 61.2)

Date of mailing (day/month/year)
 07 March 2001 (07.03.01)

To:
 Commissioner
 US Department of Commerce
 United States Patent and Trademark
 Office, PCT
 2011 South Clark Place Room
 CP2/5C24
 Arlington, VA 22202
 ETATS-UNIS D'AMERIQUE
 in its capacity as elected Office

International application No.
 PCT/AU00/00827

Applicant's or agent's file reference

International filing date (day/month/year)
 10 July 2000 (10.07.00)

Priority date (day/month/year)
 15 July 1999 (15.07.99)

Applicant

CANNING, John

1. The designated Office is hereby notified of its election made:

in the demand filed with the International Preliminary Examining Authority on:

14 February 2001 (14.02.01)

in a notice effecting later election filed with the International Bureau on:

2. The election was

was not

made before the expiration of 19 months from the priority date or, where Rule 32 applies, within the time limit under Rule 32.2(b).

The International Bureau of WIPO
 34, ch min d s C I mbettes
 1211 G neva 20, Switz rland

Facsimile No.: (41-22) 740.14.35

Authorized officer

C. Cupello

Telephone No.: (41-22) 338.83.38

**PATENT COOPERATION TREATY
PCT
INTERNATIONAL PRELIMINARY EXAMINATION REPORT**

REC'D 13 NOV 2001

WIPO

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(PCT Article 36 and Rule 70)

Applicant's or agent's file reference AH:DGC:SL:FP12965	FOR FURTHER ACTION	See Notification of Transmittal of International Preliminary Examination Report (Form PCT/IPEA/416).	
International Application No. PCT/AU00/00827	International Filing Date (<i>day/month/year</i>) 10 July 2000	Priority Date (<i>day/month/year</i>) 15 July 1999	
International Patent Classification (IPC) or national classification and IPC Int. Cl. ⁷ G02B 5/28, 6/34			
Applicant THE UNIVERSITY OF SYDNEY et al			

1. This international preliminary examination report has been prepared by this International Preliminary Examining Authority and is transmitted to the applicant according to Article 36.

2. This REPORT consists of a total of 3 sheets, including this cover sheet.

This report is also accompanied by ANNEXES, i.e., sheets of the description, claims and/or drawings which have been amended and are the basis for this report and/or sheets containing rectifications made before this Authority (see Rule 70.16 and Section 607 of the Administrative Instructions under the PCT).

These annexes consist of a total of 3 sheet(s).

3. This report contains indications relating to the following items:

- I Basis of the report
- II Priority
- III Non-establishment of opinion with regard to novelty, inventive step and industrial applicability
- IV Lack of unity of invention
- V Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement
- VI Certain documents cited
- VII Certain defects in the international application
- VIII Certain observations on the international application

Date of submission of the demand 14 February 2001	Date of completion of the report 26 October 2001	- 9 NOV 2001
Name and mailing address of the IPEA/AU AUSTRALIAN PATENT OFFICE PO BOX 200, WODEN ACT 2606, AUSTRALIA E-mail address: pct@ipaustralia.gov.au Facsimile No. (02) 6285 3929	Authorized Officer MICHAEL HALL Telephone No. (02) 6283 2474	

I.	Basis of the report
<p>1. With regard to the elements of the international application:*</p> <p><input type="checkbox"/> the international application as originally filed.</p> <p><input checked="" type="checkbox"/> the description, pages 2-15, as originally filed, pages , filed with the demand, pages 1, 1A, received on 27 September 2001 with the letter of 26 September 2001</p> <p><input checked="" type="checkbox"/> the claims, pages 17, as originally filed, pages , as amended (together with any statement) under Article 19, pages , filed with the demand, page 16, received on 27 September 2001 with the letter of 26 September 2001</p> <p><input checked="" type="checkbox"/> the drawings, pages 1-12, as originally filed, pages , filed with the demand, pages , received on with the letter of</p> <p><input type="checkbox"/> the sequence listing part of the description: pages , as originally filed pages , filed with the demand pages , received on with the letter of</p>	
<p>2. With regard to the language, all the elements marked above were available or furnished to this Authority in the language in which the international application was filed, unless otherwise indicated under this item. These elements were available or furnished to this Authority in the following language which is:</p> <p><input type="checkbox"/> the language of a translation furnished for the purposes of international search (under Rule 23.1(b)). <input type="checkbox"/> the language of publication of the international application (under Rule 48.3(b)). <input type="checkbox"/> the language of the translation furnished for the purposes of international preliminary examination (under Rules 55.2 and/or 55.3).</p>	
<p>3. With regard to any nucleotide and/or amino acid sequence disclosed in the international application, the international preliminary examination was carried out on the basis of the sequence listing:</p> <p><input type="checkbox"/> contained in the international application in written form. <input type="checkbox"/> filed together with the international application in computer readable form. <input type="checkbox"/> furnished subsequently to this Authority in written form. <input type="checkbox"/> furnished subsequently to this Authority in computer readable form. <input type="checkbox"/> The statement that the subsequently furnished written sequence listing does not go beyond the disclosure in the international application as filed has been furnished. <input type="checkbox"/> The statement that the information recorded in computer readable form is identical to the written sequence listing has been furnished</p>	
<p>4. <input type="checkbox"/> The amendments have resulted in the cancellation of:</p> <p><input type="checkbox"/> the description, pages <input type="checkbox"/> the claims, Nos. <input type="checkbox"/> the drawings, sheets/fig.</p>	
<p>5. <input type="checkbox"/> This report has been established as if (some of) the amendments had not been made, since they have been considered to go beyond the disclosure as filed, as indicated in the Supplemental Box (Rule 70.2(c)).**</p>	

* Replacement sheets which have been furnished to the receiving Office in response to an invitation under Article 14 are referred to in this report as "originally filed" and are not annexed to this report since they do not contain amendments (Rules 70.16 and 70.17).

** Any replacement sheet containing such amendments must be referred to under item 1 and annexed to this report

V. Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

1. Statement

Novelty (N)	Claims 1-14	YES
	Claims	NO
Inventive step (IS)	Claims 1-14	YES
	Claims	NO
Industrial applicability (IA)	Claims 1-14	YES
	Claims	NO

2. Citations and explanations (Rule 70.7)

Citations

D1 : US 5164956

D2 : GB 2209408

D3 : WO 86/01286

NOVELTY (N) AND INVENTIVE STEP (IS)

D1 teaches a multiperiod grating for surface emitting lasers, including a waveguide having superimposed first and second order gratings (eg, column 7 lines 18-29, 51-68, Figure 3C of D1). D2 teaches an optical waveguide grating filter, where the waveguide has two superimposed second order gratings of dissimilar periods which give rise to a further first order harmonic component (eg, Abstract, page 4, Figures 1-2 of D2). However, both the gratings of D1 and D2 are surface relief gratings, with no teaching or suggestion of gratings formed by refractive index variations as per the claims.

D3 teaches an optical fibre strain gauge, including an optical fibre waveguide having pairs of superimposed gratings of different grating spacings, which act as reflection filters (eg, page 5 line 7 to page 6 line 29 of D3)..However, there is no teaching or suggestion that the gratings comprise different orders with respect to a common operating wavelength, as per the claims (see also page 1 lines 26-28 of the instant application).

The claims are therefore novel and inventive over any obvious combination of the prior art.

INDUSTRIAL APPLICABILITY (IA)

The subject matter of the claims is applicable to optical waveguide grating devices.